by the SSCI survey. Some 38% of the respondents say they're getting price breaks of 10-20% on carbon steel imports. An almost-as-large 25% report the same kind of saving on incoming stainless.

Steel buyers also report continuing good overseas bargains—with 13% noting that these tags are "substantially below" comparable domestic levels. That's a bit above the 10-11% readings of the previous two months.

Nor are these purchases likely to diminish in the months ahead. Some 12% of the service centers, for instance, expect to increase their dependence on imports over the next six months—four times as many as the small 3% who expect to reduce their overseas purchases.

Inventories

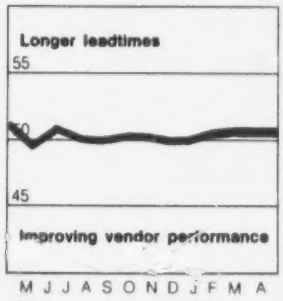
These same steel surveys also suggest that inventories are probably as low as they're going to go. Respondents still talk in terms of further reductions. But this seems to be little more than wishful thinking. The facts are that both distributor and buyer stock levels (measured in terms of months' supply) have been virtually unchanged since the beginning of the year.

One possible reason for the end of inventory paring—and from increased activity: Some respondents are becoming somewhat concerned about spotty tightness in the months ahead. A few steel buyers, for example, already have singled out some grades of c-r sheet, electrical sheet, and stainless as areas that will bear close watching.

Monthly procurement status report

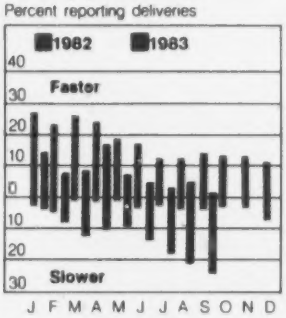
Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.

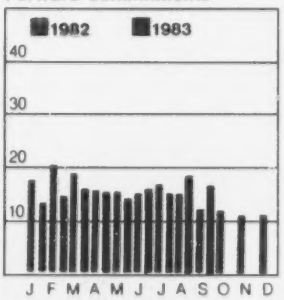


Delivery performance

Percent reporting deliveries

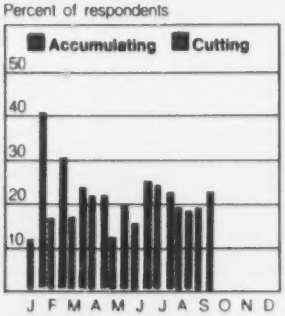


Forward commitments



Inventory strategy

Percent of respondents



Source: NAPM

PROCUREMENT STATUS

Moderate leadtime stretchouts

The slow, steady rise in leadtimes continues—as seasonal demand improvement is added to the general business recovery.

By and large, however, stretchouts have been quite moderate—except in the case of IC's and some other electronic components. ***PurchasingWorld's*** exclusive leadtimes continue to be clocked in at 51 (just above the neutral 50 level).

This reassuring trend is confirmed by ***PW's*** item-by-item rundown—where (1) leadtime declines (though less numerous than a few months ago) are still helping to at least partially offset products that are now moving out, and (2) more than half of the 150 or so items monitored on a regular basis remain unchanged from six months earlier.

Still other comforting signs come from:

- **The latest NAPM Business Survey Committee report:** Figures show few buyers are really worried with (1) those cutting and adding to inventories just about balancing each other out and (2) forward commitments holding pretty steady.
- **Rising industrial employment:** This would seem to suggest that vendors—after sitting on the sidelines for months—waiting to see if the business recovery was for real—are finally beginning to reactivate idled facilities.
- **Ample capacity:** The average factory is still operating at close to 10% under preferred levels. If projections for more moderate growth over the next few quarters (4% at annual rate versus 8% in the second quarter) are correct, few major bottlenecks are likely to crop up.

Upshot: Given all of the above factors, a good case can be made for stabilization in leadtimes by year-end or early 1984—only moderately above the super-fast delivery levels of late last year. ***PW***

Leadtimes and availability

Chicago: Some small increases in electrical materials such as wire, conduit, boxes, conductors, and switches (to 2 weeks). Also on the upside are selected electronic components, polyethylene bags (6-8), film laminations (12), h-r steel sheets (2-3), steel plates (2-4), brass sheet (8), brass tube (8-10), and plywood (2-3).

Cleveland: Aluminum is out a bit with one supplier booked through the first quarter. Some spotty tightness in stainless and carbon steel, too. Coil coating paint is also out fractionally (to 4-5 weeks). But unchanged are 2-ply fiber drums (2), corrugated (3), folding boxes, and (4) polyethylene and PVC resins (2-3).

Los Angeles: Somewhat longer weekly leads for galvanized steel (6-8), copper fittings (6-7), pumps (6-8), stainless (8-10), silbrazed fittings (17-21), and printed circuit boards (14). But coming in are grey iron castings (6-8), brass castings (6-8), insulation material (6-8), paint (3-5), and cushion seals and gaskets (6).

BUSINESS DATATRAK

Houston: Extending out to these new monthly waits are reciprocal compressors (8-12), and field-fabricated presure vessels (7-14). But coming in (also in months) are pumps (8-10), high-pressure heat exchangers (4-6), alloy and carbon steel heat exchanges (3-6), shop-fabricated steel pipe (4-6), and steam turbines (10-14).

Philadelphia: Some increased weekly waits in steel—7-8 for stainless bar, 3-4 for carbon round coil, stock-to-18 for carbon bar from minimills, and structurals (4-13). But little change in aluminum—12 for sheet and plate and 6-8 for bar, extrusions, and tubing. Also unchanged are standard fasteners and valves (both 5-8).

Pittsburgh: Minor extensions to these new weekly levels: corrugated boxes (3-4), corrugated rolls (2-3), and laminating papers (6-9). But chipboard is in fractionally (to 3-4). Other typical (unchanged) leads: maintenance paint (5), polyethylene and PVC resins (4), most alloying material (2), and mill quantities of copper fabricated products (6).

Leadtimes (in weeks)

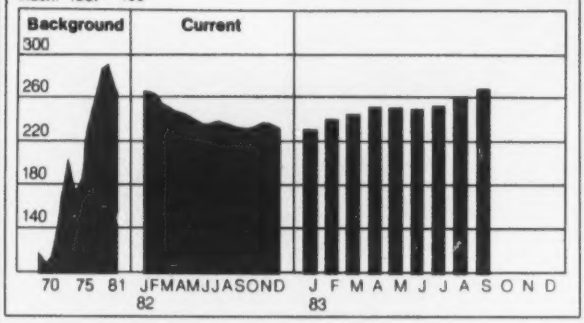
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	7	7	5
C-R Sheet (Chgo)	10	10	13
Plate (Phil)	6	4½	4½
Plate (Chgo)	3	2½	2
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	4½	4½	5
H-R Bars (Chgo)	2½	2½	2
Cold-Drawn Bars (Phil)	4½	4½	6
Galvanized (LA)	7	5½	4
Galvanized (Chgo)	7	7	9
Structurals (Chgo)	2½	2½	2
Structurals (Hous)	17	17	17
Tubing (Phil)	6	6	19
Grey Iron Castings (LA)	7	8½	9
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	7	7	7
Pipe, Carbon (Hous)	13	13	20
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	13	13	13
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	8	8	8
ICs (Linear) (Phil)	11	11	11
Motors (Phil)	21	21	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	7	7	7
Relays (Chgo)	15	15	15
Resistors (Chgo)	10	10	10
Resistors, Wirebound (Phil)	10	10	10
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2½	2	2
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	1/5	1/5	1/5
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Naphthalene (Chgo)	2	2	2
Paint (LA)	5	4	4½
Paint, Coil Coating (Pgh)	4	4	3
Paint, Maint. (Clev)	2	2	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Clev)	2½	2½	2
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2½	2	1
PVC Resin (Pgh)	4	4	4
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	4
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Clev)	3	3	3
Cartons, Corrugated (Hous)	3	3	3
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	4½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	4	4	4
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	9
Aluminum Plate (Chgo)	9	9	9
Aluminum Sheet (LA)	4½	4½	6½
Aluminum Sheet (Chgo)	14	14	9
Brass Castings (LA)	7	8½	7½
Brass Rods (Chgo)	3½	3½	4
Brass Sheet (Chgo)	8	6½	4
Brass Tube (Chgo)	9	6½	5
Copper Fittings (LA)	6½	5½	5½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	6½	6½	6
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	2	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	3	3
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	2	2	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	12	12	12
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	52	52	52
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	½	½	½
Fasteners (LA)	4	4	4
Fasteners, Std. (Phil)	2	2	3½
Heat Exchangers, Carbon-alloy Steel (Hous)	20	20	30
Heat Exchangers, Hi-pressure (Hous)	21	21	43
Insulation Mat'l. (LA)	7	8½	8
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	1½	1½	1
Pumps (Hous)	39	41	41
Pumps (LA)	7	4½	9
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	6	5
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	8	8	8
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

Latest month	267.9
Month before	265.2
Year ago	239.0

Index: 1967 = 100



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	347.00	347.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt.	24.40	24.40	24.40
Steel, bars, dlvd. Phila., cwt., merchant quality	17.50	17.50	14.35
Steel, bars, Pitts, cwt.	17.50	17.50	14.35
Steel, bars, C.R., Pitts, cwt.	26.00	26.00	31.00
Steel, plates, Pitts., cwt.	25.75	25.75	24.25
Steel, plates, H.R., Pitts., cwt.	25.75	25.75	24.25
Steel, sheets, C.R., Detroit, cwt.	26.15	26.15	24.65
Steel, strip, C.R., Chi., cwt.	29.05	29.05	29.05
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	0.755	0.762	0.450
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cost ingot, lb.	4.95	4.95	4.95
Brass, red, 85%, [sheet], lb.	1.23	1.27	1.15
Brass, yellow, [sheet], lb.	1.17	1.21	1.09
Cadmium, ton lots, lb.	1.25	1.25	1.00
Copper, electrolytic, wire bars, refd., lb.	0.73	0.77	0.72
Copper sheet, over 24 in., lb.	1.32	1.36	1.24
Lead, common, N.Y., lb.	0.20	0.20	0.26
Magnesium, pig ingot, [99.8%], lb.	1.38	1.38	1.34
Mercury, 20 fl. lots, N.Y., fl.	317.00	288.00	370.00
Molybdenum Climax Oxide/bags, lb.	4.65	4.65	5.85
Nickel, electrolytic, producer, lb.	3.20	3.20	3.20
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	10.43	12.20	8.21
Tin, Straights, N.Y., lb.	6.41	6.43	6.23
Zinc, Prime West, East St. Louis, lb.	0.46	0.46	0.42
Zinc, die casting alloy, No. 3, lb.	0.525	0.525	0.455
PAPER			
Uncoated book 13 offset, ton	730.00	680.00	800.00
Watermarked bond, ton	845.00	845.00	845.00
Gummed sealing tape, carton	15.50	15.50	15.70
Boxboard, mach. clay ctd. recycled sheets 80 bright, .016, ton	475.00	475.00	475.00
Wrapping paper, std. distribution cost, kraft, basis wt. 50 lb., roll	28.00	28.00	28.00
Kraft linerboard, 42 lb., unbleached, ton	290.00	290.00	270.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	0.284	0.262	0.257
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	1.00	1.00	0.97
Cotton middling, 1", N.Y., lb.	0.712	0.372	0.579
Printcloth, 48", 80x80, N.Y., spot. yd.	0.74	0.66	0.56
Army duck, 37", 13 oz., yd.	1.63	1.63	1.00
Blended printcloth, 64", 78x54, yd.	0.74	0.72	0.64
20s combed yarns	2.10	1.78	1.72
Wool tops, N.Y., lb.	3.60	3.60	3.60
CHEMICALS			
Acrylonitrile, tanks, lb.	0.43	0.43	0.46
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	160.00	150.00	210.00
Benzene, petroleum, tanks, Houston, gal.	1.50	1.50	1.47
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	0.58	0.58	0.66
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	0.106	0.106	0.101
Glycerine, synthetic, tanks, lb.	0.730	0.730	0.805
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.480	0.480	0.715
Naphthalene, crude, tanks, lb.	0.22	0.22	0.22
Phthalic anhydride, tanks, lb.	0.305	0.305	0.330
Polyethylene resin, low density liner film grade (market price), lb.	0.38	0.38	0.25
Polypropylene, homopolymer grade (market price), lb.	0.37	0.37	0.375
Polystyrene, general purpose grade (market price) lb.	0.37	0.37	0.38
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.34	0.34	0.35
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	132.50	132.50	135.00
Sulphuric acid, 66%, commercial, tanks, ton	56.35	56.35	93.69
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.33	1.33	1.45
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	330.50	335.10	296.10
Lumber 2x2, pine, mbf, cl	322.90	345.10	271.97
Plywood, plyform, 3/4", msf, cl	546.70	561.40	557.50
Plywood, 5/8", msf, cl	357.15	363.25	343.39
Cement, bulk, ton, tl	61.79	61.80	62.07
Sand, ton, cl	5.96	5.95	5.88
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	45.73	45.73	45.88
Crushed stone, 1½", ton, cl	8.00	7.90	7.75
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.76	0.75	0.75
Gypsum sheathing, ½"x1"x8", msf, tl	171.46	169.30	156.32
Brick, common, per thousand, tl	172.05	171.95	177.15
Asphalt paving, AC-20	158.71	158.58	156.24
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.66	6.69	6.55
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	25.75	26.00	24.75
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	31.25	31.75	32.25
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.758	0.970	0.952
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.858	0.870	0.949
Heating oil, No. 2, Chi., bulk, gal.	0.828	0.848	0.951
Heating oil, No. 2, N.Y., bulk, gal.	0.848	0.868	0.977
Heavy fuel, PS 400, Los Angeles, rack, bbl.	26.25	25.25	25.35
Jet kerosene, gal.	0.803	0.830	0.990
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.490	0.490	0.460
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	82.00	83.00	55.00
Steel, No. 1, hvy., dlvd., Chi., ton	77.00	77.00	47.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	0.655	0.685	0.525
Copper, No. 2, East, wholesale buy, dlvd., lb.	0.535	0.598	0.455
Brass, red, East, wholesale buy, dlvd., lb.	0.585	0.645	0.485
Brass, yellow, East, wholesale buy, dlvd., lb.	0.360	0.360	0.315
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	0.475	0.490	0.240
Alum., mixed clip., E., wholesale buy, dlvd., lb.	0.495	0.510	0.250
Zinc, old, East, wholesale buy, dlvd., lb.	0.145	0.145	0.095
Lead, clean solids, East, wholesale buy, dlvd., lb.	0.140	0.115	0.150
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	28.00	28.00	5.00
Paper, old corrug. box, dlr., N.Y., ton	22.00	20.00	4.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	0.100	0.100	0.130
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	0.33	0.34	0.34

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Profile of the purchasing professional —1983

Who manages the business of buying in American industry?

Well-educated, experienced, decision-makers who have wide-ranging responsibilities and authority.

That's the profile that emerges from ***PurchasingWorld***'s latest study of the world of the purchasing professional. The data that fill in the picture come from more than 1300 ***PW*** readers selected at random. The findings show that the typical ***PW*** reader:

- Spends more than $62 million a year for equipment, supplies, and services. One quarter of the respondents spend, on the average, close to $200 million annually.
- Has a dozen decision-making responsibilities from selection and evaluation of suppliers (99%) through control of inventories (81%) to specification of mode or carrier for outbound shipments. (More than four out of five specify mode or carrier for inbound shipments).
- Has authority to change buying decisions made by other functions (95%).
- Is a member of companywide committees—most often those concerned with cost reduction (75%), standardization (45%), and product design (28%).
- Has about a dozen years experience in the purchasing function. About half have been in purchasing for more than 10 years, 51% for less than ten.
- Has not necessarily spent all his business career in purchasing. Other work cited by respondents included that in production (38%), inventory control (37%), management (31%), and sales and marketing (24%). Finance, engineering, traffic, material control, and quality control were also mentioned, in that order.
- Attended college (69%). Close to 10% of the respondents hold advanced degrees. The major field of study mentioned most often is business administration (60%). Fourteen percent majored in engineering, 12% in liberal arts.

Other study results

PurchasingWorld readers (87% of whom are males) have an average age of 44, and an average income of $34,000. Half are in the $25,000-$39,999 bracket, and 6% earn more than $60,000 a year.

A large majority (73%) make an average of seven trips a year to visit suppliers or potential suppliers.

Purchasing professionals work closely with other key functions, the study shows, primarily with production (82%) and top management (60%). Over half also work with finance, plant engineering, and design engineering. Slightly fewer also work with the sales/marketing and MIS/data processing functions.

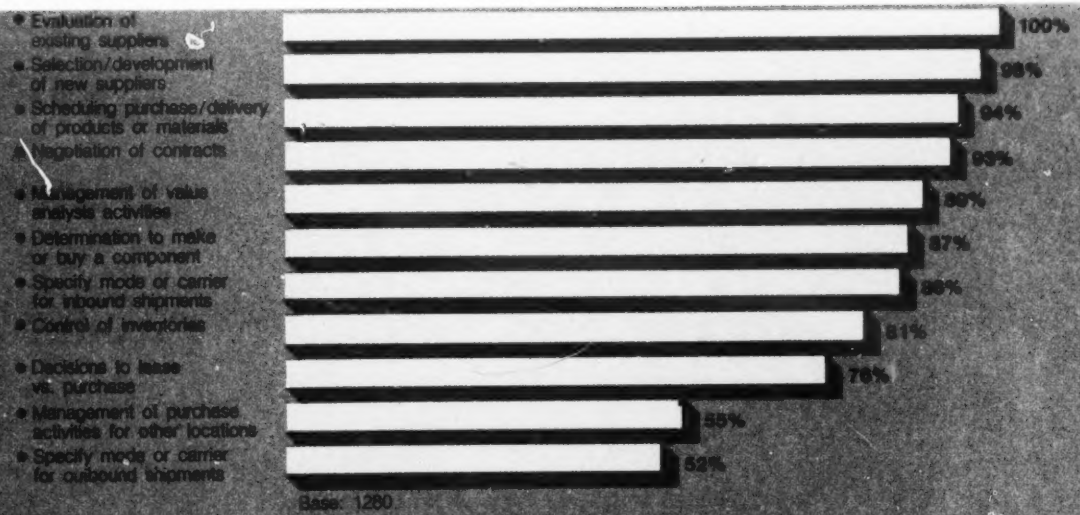
Seventy-one percent of the companies represented in the study have definite policies that require suppliers to clear through purchasing before contracting other departments.

Vendor performance in all its aspects comes through as purchasing's major concern today. Repeatedly, respondents referred to problems involving quality of purchased items, leadtimes, communication with suppliers, and vendor representatives' level of knowledge and technical expertise. Also frequently mentioned: cost reduction and closer control of inventory.

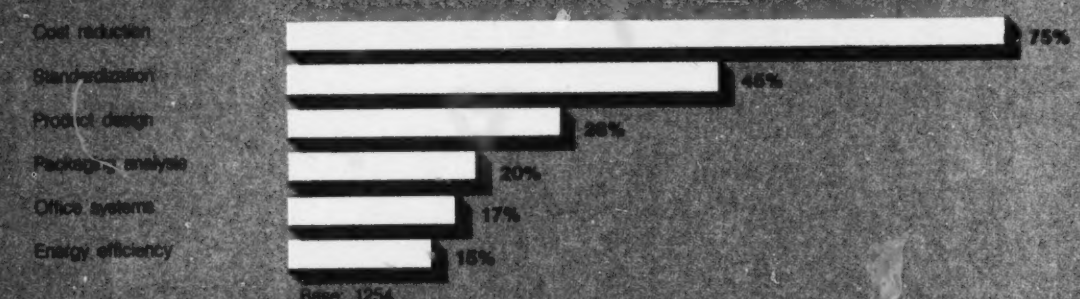
There have been changes in purchasing responsibility, status, experience, and pay since ***PW***'s last profile study (1981).

The average annual expenditure figure has jumped from about $42 million to $62 million, which can hardly be attributed only to inflation. The number of ***PW*** readers reporting directly to top management has gone from 50% to 55%. The decline in number of years worked in purchasing, from 16 to 12, may indicate an influx of college graduates or career-switchers from other departments, or both. The rise in average annual salary from $25,000 to $34,000 reflects the increased purchasing responsibility and authority revealed in the 1983 study. ***PW***

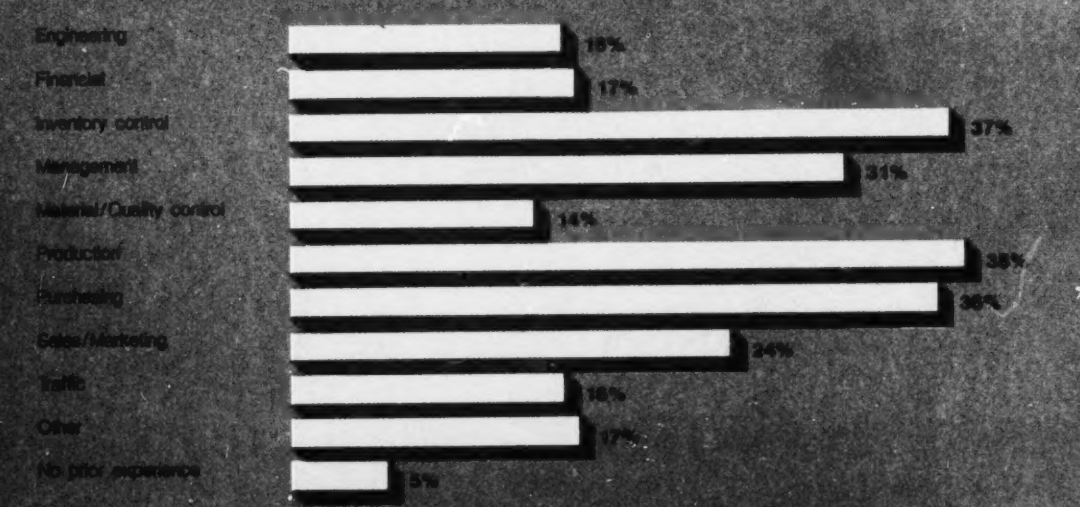
Purchasing department responsibilities



Committees where purchasing professionals are members



Work experience



Expect heavy spending for pollution control and safety equipment

Continued heavy buying of environmentally-related equipment is in the cards—despite the Administraton's avowed aim to lighten the regulatory load on business.

This year, for example, purchases of nonproductive pollution control gear are targeted to reach the $9 billion level. Indeed, the only consolation here is that this will be about 5% under last year's total.

And the picture is much the same for OSHA-related activities. Some $5.2 billion will be earmarked for safety and health equipment this year. More significant, that's actually 16.4% ahead of last year's level and represents a double-digit increase even in real terms.

"These are areas we expect to be vitally concerned with for many years" is the way one machinery buyer puts it—adding that in his particular case these will be the only sectors where capital outlays will be up in 1983.

Other key findings on how things are shaping up in the environmental control area—all culled from a recent McGraw-Hill survey:

- The combined total of spending on pollution and OSHA equipment, $14.2 billion, is pretty much unchanged from other recent years (see chart). More important, it represents about 4.6% of all 1983 capital outlays)—actually a bit above the 4.4% figure noted for the past year.
- Subtantial industry-by-industry variation is anticipated. This year, for instance, the biggest bites out of the capital spending dollar, as far as pollution control is concerned, will be in nonferrous metals (11.3%), paper (8.7%), electric utilities (7.1%), chemicals (6.5%), and stone, clay, and glass (5.6%).
- Biggest percentages of the capital spending dollar traceable to OSHA purchases: textiles (5.6%), instruments (3.8%), chemicals (3.2%), steel (2.6%), rubber (2.4%), food (2.4%), and paper (2.1%).
- Hefty spending will continue over the subsequent three years (1984-86) when average annual outlays are estimated at $8.5 billion and $5.9 billion for pollution control and OSHA equipment, respectively. Together these suggest about a 4% chunk of the capital spending dollar.

The decline from this year's 4.6% bite represents somewhat reduced emphasis on pollution control. In the words of the survey "industry is closing the gap between its environmental practices and those required by government regulation. Therefore, even if there's no relaxation in existing regulations, pollution control outlays would likely continue to decline in importance relative to total capital spending."

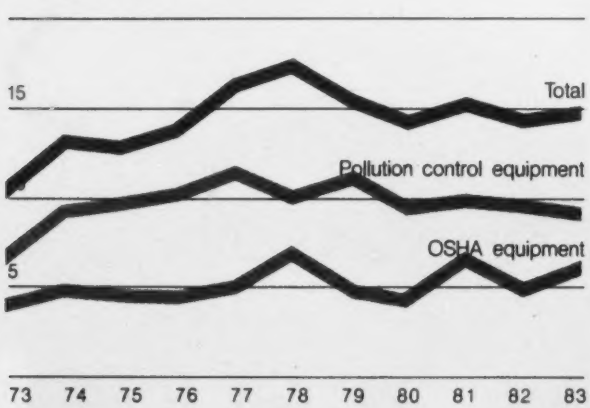
This year's projections on pollution control, incidentally, are pretty much confirmed by another survey (by the Commerce Department) which puts total equipment outlays here at $8.3 billion—not all that different from the McGraw-Hill $9.0 billion estimate.

Both studies also suggest that the biggest share of pollution control spending this year will be used to clean up our air. In the case of the private survey, the pertinent figures are 44% for air, 37% for water, and 19% for solid waste disposal.

On the other hand, a modest change in mix seems to be in the making. Thus the study suggests that, over the longer pull, a somewhat bigger percentage of the total will be spent on solid waste disposal and less on air and water clean-up gear. ***PW***

The high cost of environmental and personnel protection

Billions of dollars



Source: McGraw-Hill

Expected 1983 expenditures
(percent of capital spending dollars)

Industry	OSHA	Pollution	Total
Steel	2.6	5.7	8.3
Nonferrous metals	1.9	11.3	13.2
Elec. machinery	1.7	2.1	3.8
Nonelec. machinery	1.3	1.4	2.7
Automotive	0.4	0.8	1.2
Aerospace	0.9	2.3	3.2
Fabricated metals	1.7	2.3	4.0
Instruments	3.8	4.4	8.2
Stone, clay, glass	1.3	5.6	6.9
Chemicals	3.2	6.5	9.7
Paper	2.1	8.7	10.8
Rubber	2.4	3.1	5.5
Petroleum	1.3	4.2	5.5
Food & beverages	2.4	5.3	7.7
Textiles	5.6	5.5	11.1
Mining	1.5	3.3	4.8
Elec. utilities	1.6	7.1	8.7

Packaging buyers see stable market

Packaging won't be quite the bargain it's been over the past year or so. But by the same token, most price increases over the next 12 months are likely to be on the modest side—just about in line with the projected overall industrial inflation rate.

So say the vast majority of buyers responding to a nationwide survey by *PurchasingWorld*. Behind their cautious optimism: A combination of factors—including continued ample or even more-than-ample supply, relatively moderate demand gains, and anticipated hard-nosed bargaining on the part of packaging PMs, who still see this as basically a buyers' market.

In the words of one East Coast purchasing executive, "We've still got plenty of bargaining leverage—and while we are tentatively scheduling a 5-6% increase in average packaging costs for the next four quarters, I'm still hopeful we can shave a percentage point or so from this estimate."

Survey findings

In any event, here's how he and his fellow buyers see the packaging scene unfolding:

■ **Recent price performance:** Some four out of every five respondents say that over the past 12 months they have been able to hold tags at or below year-earlier levels. It's a conclusion that's confirmed by Uncle Sam's official price indexes which show fractional declines in average corrugated and glass container tabs vis a vis yearago readings—and virtually no meaningful change in metal cans.

■ **Current discounting:** Almost all areas are noted. But by far the most frequent mention is given to corrugated, where better than one out of four say they have been able to negotiate some concessions off official list levels.

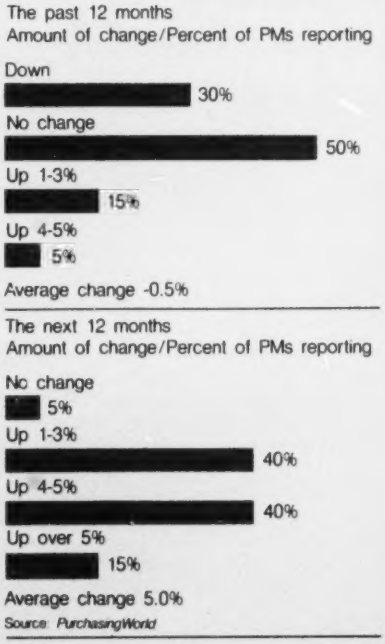
■ **Prices over the next 12 months:** Every single respondent is reconciled to some acceleration. But, as noted earlier, the increases for the most part will be quite tolerable. Indeed, only about 15% see average prices moving up by more than 5%. Some of the typical ranges of increases suggested: corrugated, 3-7%; metal cans, 4-6%; and wood pallets, 3-4%. Buyers also see discounts somewhat harder to come by.

Confirmation of these basically liveable price increases is again available—this time from the big econometric forecasting firms which factor in all the major supply-demand-cost determinants. Wharton, for example, sees fourth-quarter 1984 prices running only these percentages above comparable year-earlier levels: paperboard containers (3½%), glass containers (4%), metal containers (5%), and wood containers (7%).

■ **Demand and availability over the next 12 months:** The average increase in packaging use (in real, or physical, terms) is put at just around 5%—with virtually no concern about supplies (except for one or two respondents who felt leadtimes could stretch out a bit).

One interesting survey finding: the wide variation in the percent of overall product cost that goes for packaging. It ranges all the way from a low of only 0.3% to well over 10%—with consumer-type items generally running in the upper end of the range.

Packaging price trends



Buying tactics

But whatever the overall impact, packaging buyers seem determined to keep a lid on future price hikes. Aside from the usual comments about "hard-nosed bargaining," quite a few say they will continue to look at material substitution—with the accent on more use of plastics. One tells of the substitution of poly bags for folding boxes and another of a switch from metal to injection-molded plastic carrying cases.

Other hold-the-line ploys include redesign of packaging, cooperative purchasing, use of thinner gauge material, reuse of containers, and vendor participation in both value analysis and package redesign.

On the latter score, one PM says he is encouraging his suppliers to do the engineering work by awarding them as much as a year's business if they manage to come up with a cost-saving idea.

Another plans to play the competitive angle to the hilt in corrugated. He adds that he has opened bidding to all potential carton sources—but will place his annual requirements with the one vendor that offers the best deal. ***PW***

DEC/1983

Purchasing World

QUALITY AUDIT

PM s[illegible]sh for [illegible]ility

PurchasingWorld

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PW PREDICTS

Robert S. Reichard, executive editor

Productivity gains limit inflation

There's good news on the price front as strong productivity gains keep a firm lid on inflationary pressures. Efficiency gains at annual rate for the total private nonfarm economy over the first, second, and third quarters of the year (3.7%, 6.6%, and 5.0% , respectively) have been greater than in the initial stages of all but two of the seven previous postwar recoveries.

Equally significant, the increase over the past two quarters has actually exceeded hourly wage and fringe gains. Upshot: Unit labor costs have fallen for two consecutive quarters—the first time this has happened in over 20 years. In the manufacturing sector, the efficiency performance is even more impressive (8%, 9%, and 12% at annual rates over the first three quarters). This is one reason why overall industrial producer prices have risen less than 1% since the beginning of the year.

To be sure, fourth-quarter output-per-manhour gains (as they are often called) might not be quite as robust. Employers are now adding to their workforces, thereby spreading new output gains over a larger number of workers.

But that's not to say we're on the verge of any big, new increase in labor costs. Reason: Pay rates—the numerator of the unit labor cost ratio—continue to move up at a surprisingly modest pace. A new Labor Department report on major collective bargaining for the first nine months of 1983 suggests only a 1.7% increase over the first year of these contracts—and only 2.8% over the life of the pacts. That's the lowest nine-month average since 1968 when this data was first recorded.

Even if productivity gains do slow down, it will be some time before any appreciable increase in unit labor costs is noted. Indeed, as of now, it looks like close to a zero increase in these costs for the year. You'd have to go back to the great recess ion of 50 years ago to find this kind of trend.

Next year, however, unit labor costs will almost certainly advance as (1) labor unions regain a bit more of their bargaining leverage and (2) bringing less efficient plants and equipment into use makes productivity gains harder.

Even so, the prognosis is for moderate rather than any major increases in labor costs next year. If you assume a 2-3% increase in productivity and about a 6-7% increase in wage rates next year (both quite reasonable given the current business climate), you still end up with only a 4% boost in unit labor costs—remarkably low for the second year of a robust economic recovery.

And that's why so many forecasters are so optimistic about 1984 inflation—with almost all the projections falling in the 4-6% range.

Copper

Buyers are still calling the signals as producer prices continue to fall. And judging from top-heavy stocks (Comex and the LME alone hold over 800,000 tons), chances of any sustained nearterm rally are just about nil. Behind the softness: Continued all-out production by Third World producers and less-than-anticipated demand increases. That's not to say U.S. consumption won't be up 5-10% this year. But that's low relative to previous business recoveries—as demand for capital equipment (which accounts for two-thirds of the metal's use) continues

Energy

It looks like another good year for energy users in 1984—provided you "buy" the major assumption that oil prices will continue on their current stable path.

The accompanying table (reflecting the latest Department of Energy projections) tells the story. In a nutshell, it's a "no sweat" situation—except for natural gas, where another close-to-double-digit increase is currently anticipated.

Indeed, in the case of gasoline, prices could well slip a bit under current levels by next year at this time—brought on by a combination of increasing producer competition and improved overall miles-per-gallon performance.

Wholesale heating oil quotes, meantime, will essentially remain unchanged—though there could be a temporary blip over the next few months, reflecting the normal seasonal price runup. On the other hand, average tags should still be about 8 cents/gal un der last winter's levels.

Electricity rates are also expected to remain in bounds—despite pressure from natural gas and coal (where about a 6% increase is anticipated). The average industrial rate, for example, is put near 7.64 cents/kwh by late next year—only about 7% above current readings.

Energy price trends over the next four quarters

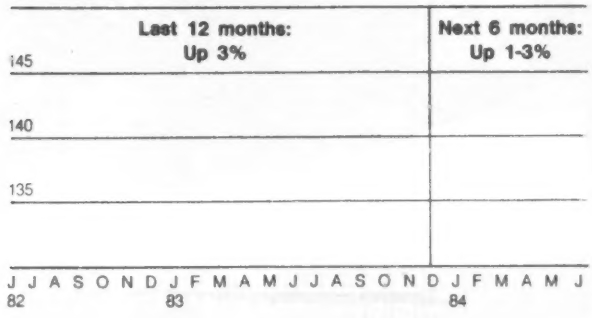
	4th qtr '83	4th qtr '84	% change
Gasoline	$1.247/gal	$1.202/gal	-3.6
No. 2 htg oil (whls)	$0.837/gal	$0.838/gal	0
No. 6 residual oil	$27.82/bbl	$28.18/bbl	1.3
Jet fuel	$0.868/gal	$0.865/gal	-0.3
Coal (utilities)	$1.715/MBtu	$1.812/MBtu	5.7
Natural gas (utilities)	$6.648/Mcf	$7.265/Mcf	9.3
Natural gas (residential)	$3.921/Mbtu	$4.328/MBtu	10.4
Electricity (residential)	$0.0715/kwh	$0.0764/kwh	6.9

Source: Department of Energy

TEXTILES

Textile mill products

Index: December 1975 = 100



CURRENT SITUATION: Slow, steady improvement is now the order of the day. Increases are now becoming a bit more numerous—with recent boosts hitting (1) acetate yarns, (2) some nylon specialty yarns, (3) army duck and osnaburgs, (4) some polyester filament yarns, and (5) lightweight grey goods. **The one big headache is imports**—with the combined apparel-textile trade deficit for 1983 put at near $9.5 billion—up a hefty 30% from last year.

DEMAND: Overall industry activity is showing some smart gains over extemely depressed 1982 levels. Mill output, for example, has been rising 1-3% a month since spring—and unemployment rates have been halved over the past year or so. In any case , it's now expected that the industry will reattain is pre-recession production levels by sometime next year. **Industry analysts are now looking for a 6% gain in 1984.**

SUPPLY: Industry operting rates have spurted—rising some 15 full percentage points since the beginning of the year (to near 90%). Nevertheless, there's little danger of any real tightness developing—as importers remain ready and able to jump into the breach. And judging from the outcrys of U.S. producers, **another big import gain could be in the offing come 1984**—despite dumping charges and recently concluded quota agreements.

PRICE OUTLOOK: The influx of low-priced imports should continue to limit price advances. Ditto, relatively restrained labor cost hikes. That's not to say, of course, that some prices won't show some fair-sized advances. But by and large, increases will be moderate—with overall textile mill product increase expected to be **up only 1-3% over the next six months—and about 4-6% for the year as a whole.**

Electronic parts

The new 256K RAM (now near $100/unit) could drop to under $20 within a year. Meantime, the current workhorse 64K chip continues to command good prices ($5-6/unit versus the $3 level of last year). Also look for substantial price increases in passive components in 1984—as demand outstrips supply and leadtimes stretch out. Candidates for big boosts here: wirewound resistors, aluminum capacitors, mica capacitors, carbon comp resistors, and connectors.

Aluminum

Prices are taking a breather after the recent runup. True, some boosts are still being posted. But these are being offset by some easiness in merchant ingot and the failure of a recent 8% hike in alloy plate to hold. Behind the pause: (1) the need for use rs to digest earlier boosts and (2) some substantial increases in operating rates (up close to 20 percentage points to near 77% so far this year).

But even if prices have temporarily levelled off, the metal remains quite bullish—with a 6% boost in shipments expected next year on top of this year's big 12% increase. This, in turn, suggests further price boosts—with ingot rising into the 80s by n ext spring to lag. True, prices will have to rise (U.S. breakeven points are in the 80-85 cents/lb range). But even 80 cents/lb may be an over-optimistic estimate for next summer.

Paper

Firming is now the order of the day almost everywhere. Some recent typical increases: Registered bond 15 lb (from $675/ton all the way up to $745/ton), uncoated book #3 offset (from $730/ton up to $760/ton), uncoated groundwood (from $535/ton up to $575/t on), and watermarked bond (from $845/ton up to $915/ton). Linerboard is also firm at the recently established $290/ton level—with further increases into the $325/ton range expected by mid-1984. But there's still some discounting in solid bleached board a s well as in grocery bags and sacks.

Paper prices ($/ton)

	3Q 1983	4Q 1983
Registered bond, 15 lb	$675	$745
Watermarked bond	$845	$915
Uncoated book #3 offset	$730	$760
Uncoated groundwood	$535	$575

Zinc

The plating and alloying metal remains fairly buoyant. Signs of the times: (1) recent increases in the U.S. producer price, (2) comparable boosts in die casting alloys, and (3) a 5% hike in the European producer prices.

And further advances can't be ruled out. Credit the firming to recent declines in producer stocks,

tightness in SHG metal, and relatively strong demand (U.S. consumption could be up 11% this year and another 10% in 1984. This, in turn, is beginning to prompt some U.S. production boosts—notably the possible re-opening of Asarco's 107,000-ton per year Corpus Christi plant.

Alkalis

Weakness pervades—with both soda ash and caustic soda still on a downward price course. As for the former, a new $15/ton Temporary Voluntary Allowance has brought the FOB Wyoming price down to $69/ton. Reason: low operating rates, which this year have been averaging in the 73-74% range. Meantime, caustic soda, a coproduct of chlorine, has been cut another $70-80/ton on the East and Gulf Coasts. All in all, quotes have been halved in less than two years. True, improved aluminum activity will take some of the heat off caustic. But the price prognosis remains basically bearish because of increased European imports.

Construction costs

A new forecast by Turner Construction Co. suggests continued moderation, with costs rising about 1.2% a quarter into early next year. And at this point in time a 4.5-5.0% increase for 1984 as a whole looks like a pretty good bet. But there could be region al differences for both materials and labor—due to variations in productivity, efficiency, and competition. On the latter score, competition for work among both contractors and materials suppliers is expected to remain intense in many areas of the country for at least another 6-12 months.

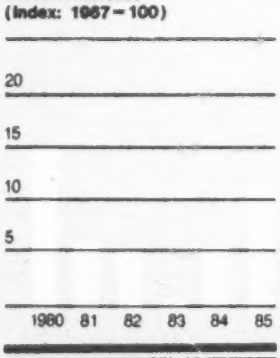
PBXs

Count on new competition from regional Bell operating companies to put new downward pressure on prices next year. The older analog voice-only PBX lines are expected to be particularly weak.

Paint

Plan on some fair-sized price boosts. Reason: rising demand—as improving auto and building markets point to a 7% increase in 1984 consumption (on top of this year's similar boost). The resulting closing of the supply-demand gap should make for about a 7-9% increase in overall 1984 paint bills—in sharp contrast to the near-level rates of the past 12 months.

Paint prices



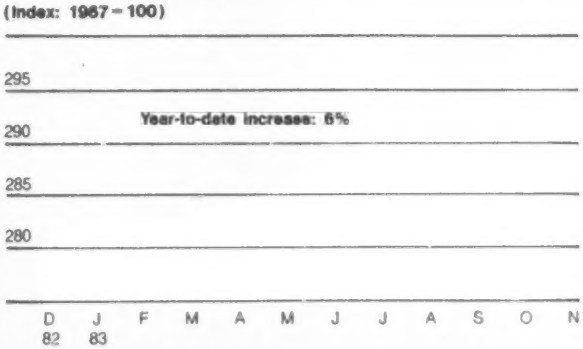
Home computers

Good buys here as Texas Instrument drops prices for its discontinued 99/4A model to under $50. Software cartridges for the model are also available for as low as $10. Commodore, Atari, and Coleco say they won't compete—but look for some off-list pricing (especially in high-priced models)—as (1) an increasing number of different machines compete for the consumers' Christmas dollar, and (2) all producers battle orders for IBM's PCjr, which will sell for as low as $700.

Lead

Prices are a bit shaky—in part because LME quotes remain far under U.S. levels. But the prognosis remains fairly bullish near-term as (1) stocks edge lower, (2) modest tonnages move to the Eastern bloc,

Plastic resin prices



Source: Bureau of Labor Statistics

Plastic resin quotes are staging a fairly strong recovery.

Official tags (as measured by the Labor Department producer price index) are up about 6% since the beginning of the year (see chart). But if you take into account some of today's reduced discounts, the rise in transaction prices in many instances is probably several percentage points higher than that.

Certainly, recent selective 4-5 cents/lb increases in polystyrene have held up well—reflecting, in large part, a big 6 cents/lb increase in the monomer. And both high- and low-density polyethylene are also up—with liner grade LDPE recently bumped 4 cents/lb. There haave been hikes in ABS, too, with appliance extrusion grades increased 6 cents/lb.

Polypropylene is another bullish area. A recent 2-3 cents/lb increase has pushed the general purpose homopolymer grade to well over 40 cents/lb. And further hikes could be in the offing here as operating rates rise into the 90% range by next year.

About the only weak areas have been polyvinyl chloride—where the past summer's 5 cents/lb boost has all but washed out. Behind the easiness here: cheap imports from both South America and Eastern Europe.